REMARKS

Claims 8, 10-14, and 18-21 are pending in the current application. Claim 8 is currently amended.

Examiner Interview Request

Applicants respectfully request an interview with the Examiner to discuss the cited art and claim amendments before the Examiner issues another Office Action.

Claim Rejections - 35 U.S.C. § 112 -Written Description

Claims 8, 10-14, and 18-21 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claim 8

With respect to claim 8, claim 8 has been amended and now recites: "wherein the optical disc is determined to be deficient if a jitter value measured after scratching the optical disc is over 10%". Applicants note, on page 3 of the September 23, 2008 Office Action, the Examiner questions the support for the functionality represented by this limitation and further asserts that the horizontal dashed line in Applicants' FIG. 6 which represents a 10% jitter value does not seem related to a failure threshold. Applicants respectfully disagree. As Applicants stated in the July 14, 2008 Response, when the jitter value becomes greater than about 10%, failures may occur. As such, by rotating the optical disc, obtaining the jitter value, and then comparing the obtained jitter value to a threshold jitter value of 10%, one may determine that the optical disc is considered deficient. For example, one may determine a disc is not deficient if the measure jitter value is less than 10% according to FIG. 6 as is

evidenced by the absence of fail-points for rotated optical discs below the dashed line. Applicants note the Examiner's assertion that the black square with the white circle therein is a fail point. However, as Applicants previously explained, this black square with the white circle therein is at 0 turns. This is clearly evidenced by FIG. 6. As claim 8 requires "rotating the optical disc along with the rotation plate", data relating to a disc at 0 turns is not relevant to the method recited in claim 8.

Further, the Examiner again questions the alleged non-fail points represented by the two circles above the dashed line. As Applicants previously stated, no threshold is generally ideal. Any threshold is generally going to result in some false-positive or false-negative results. Accordingly, in many situations a threshold is set considering the consequences that occur as a result of a false-positive and a false-negative. When determining a disc is deficient, one would rather have a situation in which false-positives occur, i.e., some discs will be considered deficient even if they are in fact okay. Specifically, in order to prevent false-negatives, discs exhibiting jitter values above about 10% may be determined to be *considered* deficient even if, in a few cases, they are not actually.

Accordingly, Applicants respectfully submit claim 8 does meet the written description requirement under §112, first paragraph.

Claims 18-21

The Examiner asserts claims 18-21 are new matter because they suggest that methods recited therein are carried out in addition to the steps recited in claim 8. For support, the Examiner references the wording of paragraph [0039] of Applicants' specification which reads:

> Apart from the endurance test of the optical disc 20, a symbol error rate (SER) or a bit error rate (BER), a focusing error signal, which is a servo

error signal, and a tracking error signal are measured, so as to optionally test the functions of the optical disc.

Applicants respectfully submit, paragraph [0039] lists other criteria for testing the functions of the optical disc which may be optionally used. The term "optionally" is used to indicate that not all embodiments require the use of the criteria listed in paragraph [0039]. The term 'Apart' is only an indication that the listed criteria were not previously focused upon in the description of the endurance test found before paragraph [0039] of the specification. Accordingly, paragraph [0039] does not suggest that measuring the symbol error rate (SER) or bit error rate (BER), servo error signal, and tracking error signal cannot be used in conjunction with the endurance test described before paragraph [0039] of the specification, as the Examiner suggests. Further Applicants direct the Examiner's attention to the definitions provided below which further demonstrate that the symbol error rate (SER), bit error rate (BER), servo error signal, and tracking error signal are well suited for endurance testing.

Accordingly, Applicants respectfully submit claims 18-21 do meet the written description requirement under §112, first paragraph.

Claims 18-21 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement.

The Examiner inquires as to the definitions of the terms "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal". Accordingly, Applicants provide the following explanation. With respect to the "symbol error rate" and "bit error rate", generally, an error rate is the ratio of the number of bits, elements, characters, or blocks incorrectly received to the total number of bits, elements, characters, or blocks sent during a specified time interval. Thus, the symbol error rate for a given set of symbols may be defined as the number of

erroneous symbols divided by a total number of symbols. Similarly, the bit error rate for a given set of bits may be defined as the number of erroneous bits divided by a total number of bits. With respect to "servo error signal", Applicants specification refers to the servo error signal as a focus error signal. The focus error signal represents a deviation from the focusing distance between an optical pickup and a recording medium. In most cases, the focusing error is related to a distance in a vertical direction. With respect to the "tracking error signal", to reproduce a signal from a recording medium, a pickup should find a designated track. In the optical disc, the track is composed of groove and land, which are uneven. The pickup should be located on one of the land and the groove. Deviation from a designated track is represented using tracking error signal. Applicants respectfully submit that a "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" may be used in a similar manner to that of a jitter value to determine whether a disc is normal or deficient. Therefore, Applicants respectfully submit that at least FIG. 6 and paragraphs [0035]-[0037] of the specification provide an enabling disclosure for claims 18-21. Accordingly, Applicants respectfully submit claims 18-21 do meet the enablement requirement under §112, first paragraph.

Therefore, for at least the reasons discussed above, Applicants respectfully request the rejections of claims 8, 10-14, and 18-21, under 35 U.S.C. § 112, first paragraph be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 8, 10-14, and 18-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0054975 "Hayashida" et al.

Initially, Applicants respectfully note that the method for testing endurance of an optical disc of independent claim 8 recites, *inter alia*, "applying pressure on the optical disc using a scratching unit ***while the optical disc rotates for up to five rotation turns***, so as to produce a scratch on a surface of the optical disc, resulting from a contact with the scratching unit; and determining whether the optical disc is deficient or normal on the basis of the scratch produced on the optical disc, wherein the optical disc is determined to be deficient if a jitter value measured from the scratch is over 10%." Applicants respectfully submit that at least the above-emphasized features of amended independent claim 8 patentably distinguish over Hayashida.

In particular, paragraph [0091] of Hayashida, which is cited by the Examiner, specifically states that "[t]he abrasion test procedure using abrasive wheels prescribed by ISO 9352 is a test procedure commonly known as Taber abrasion test and is carried out as follows." The remainder of paragraph [0091] goes on to describe the well-known Taber abrasion test. Applicants note the Taber abrasion test referred to in paragraph [0091] of Hayashida is specifically referenced in the "Background of the Invention" section of the Applicants' specification at page 3, paragraph [0007]. In particular, paragraph [0007] of the Applicants' specification states the following.

> Also, in the taber abrasion test, while using the abrasion wheel, the abrasive wear on the surface of the optical disc is very different from the scratches on the optical disc. Therefore, testing the endurance of the optical disc based on the abrasive wear caused by the abrasion wheel is not appropriate.

Applicants respectfully submit that this is evidence that the example embodiments described in the Applicants' specification and the features recited in amended independent claim 8 are not obvious in view of the Taber abrasion test.

Further, claim 8 recites "applying pressure on the optical disc using a scratching unit ***while the optical disc rotates for up to five rotation turns***." Regarding this feature, the Examiner identifies TABLE 3 of Hayashida as being "suggestive of the use of 5 cycles in an abrasion test" presumably because TABLE 3 includes a column heading of 5 Abrasion cycles. However, TABLE 3 provides no grounds for limiting the number of cycles to 5 turns since 0 to 500 turns are shown in the table. Further, **as Applicants have previously argued**, paragraph [0091], specifically ***teaches away*** from using 5 cycles or less by saying "[f]or general hard coat layers in optical information media, it is preferred to abrade them by using elastic abrasive wheels selected from CD-10, CS-10F, and CS-17, and rotating the turntable ***over 10*** to 500 cycles under a load of 2.5 N to 9.8 N."

Accordingly, absent impermissible hindsight analysis, the teachings of Hayashida do not render obvious "applying pressure on the optical disc using a scratching unit ***while the optical disc rotates for up to five rotation turns***," as recited in amended independent claim 8.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 8, 10-14, and 18-21 in connection with the present application is earnestly solicited.

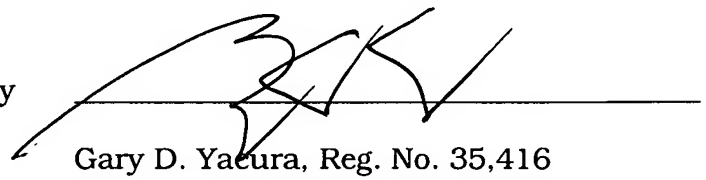
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required $130.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By 

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